Atty. Docket No. PIA31205/ANS/US

Application No.: 10/764,905

Amendments to the Claims

Please amend Claim 1 as shown below.

**Listing of Claims** 

1. (Currently Amended) A method for forming a metal line, comprising:

stacking a lower insulating layer, a lower metal line layer and an upper insulating layer;

patterning a first photosensitive film on the upper insulating layer;

using the patterned first photosensitive film as a mask, etching the upper insulating layer

until at least a portion of the lower metal line layer is exposed;

filling an etched portion of the upper insulating layer with a nitride film;

patterning a second photosensitive film over the lower metal line layer and the nitride

film;

using the second photosensitive film as a mask, etching the lower metal line layer until

the lower insulating layer is exposed to form a lower metal line pattern;

depositing an IMD (Inter Metal Dielectric) layer on the lower metal line pattern,

including the sidewalls of the lower metal line pattern, the lower insulating layer, and the nitride

film, thereby forming an air gap within the IMD layer between lines in the lower metal line

pattern;

planarizing the IMD layer to expose the nitride film;

removing the nitride film, thereby forming a contact hole in the IMD layer exposing an

upper surface of the lower metal line <u>pattern</u>;

filling the contact hole with a conductive material;

depositing an upper metal line over the conductive material.

Atty. Docket No. PIA31205/ANS/US

Application No.: 10/764,905

2. (Previously Presented) A method as defined in claim 1, wherein depositing the upper metal line comprises an Al/Cu damascene process.

3. (Previously Presented) A method as defined in claim 1, further comprising

removing the first photosensitive film after etching the upper insulating layer.

4. (Previously Presented) A method as defined in claim 3, further comprising

removing the upper insulating layer after filling the etched portion of the upper insulating layer

with the nitride film and before patterning a second photosensitive film.

5. (Previously Presented) A method as defined in claim 4, further comprising

removing the second photosensitive film before depositing the IMD.

6. (Canceled)

7. (Previously Presented) A method as defined in claim 1, further comprising, after

depositing the IMD and before removing the nitride film, planarizing the IMD layer sufficiently

to expose the nitride film.

8. (Previously Presented) A method as defined in claim 1, wherein the nitride film is

removed by wet etching.